I-5, Concrete Pavement Rehabilitation

(Lucille Street to SR 104)

What is the I-5 Reconstruction Study?

The Washington State Department of Transportation is developing a plan to rebuild 16 miles of northbound and southbound Interstate 5 extending from just south of Seattle to the Snohomish county line.

Why is WSDOT proposing this project?

Interstate 5 was built in the '50s and '60s and is the main north/south route through Washington State. For over 40 years the interstate has carried goods, services and motorists, and this section of highway now accommodates over 220,000 vehicles per day. Although the original concrete has served motorists well (its original expected life span was 20 years but it has instead lasted 40), it reflects these years of wear and tear and needs to be replaced. Motorists driving along I-5 can see the poor condition of the concrete - it has many cracks and broken concrete panels.

What WSDOT hopes to accomplish

WSDOT engineers have recommended that the existing concrete pavement be removed and replaced with thicker concrete reinforced with steel dowel bars placed at the joints. The thicker concrete would ensure at least another 40 years of service, and the dowel bars would help the roadway behave like a single unit rather than like individual concrete panels. This would help minimize the rough "thump, thump, thump" motorists now hear and feel as they drive on I-5 through Seattle.

What are the project timelines

This project is in the beginning stages of planning. WSDOT engineers know the condition of the pavement is poor, they know it needs to be replaced, and they know how they want to replace it. While this reconstruction planning is under way, WSDOT is also looking

Existing



at operational issues along the same section of I-5 (for example, how lanes and ramps are configured, safety considerations, weaving patterns of drivers, etc.) to see how improvements to freeway operations can be instituted at the same time the freeway is being reconstructed.

Although the entire scope of work is not yet defined, WSDOT engineers know that this reconstruction effort will be mammoth in proportions. The project involves actually excavating and rebuilding the entire freeway. This project represents the largest reconstruction effort ever taken on by WSDOT in an urban environment. The closest similar project has been under construction for six years on I-90 near Spokane. This I-90 project has had few impacts to motorists, because the roadway was realigned to maintain capacity. On I-5, this is not an option, due to space limitations through the corridor. This project will very possibly be split into over a dozen stages and may take up to 25 years to complete, however, we are researching different avenues to reduce the time of construction through innovation. The first stage of work will probably occur in north Seattle near Northgate, as concrete in that area is in the poorest condition.

What is WSDOT doing to involve and inform the public?

At this point, this effort is still in the study phase and the dimensions of an actual project are still unknown. Once the department starts designing specific approaches to construction, public input will be sought, especially in relation to traffic impacts and environmental issues such as noise.

Financial Information

This project is not funded for design, but efforts are mostly complete in the planning of this project. The current overall project cost is estimated at \$858 million. The legislature did not appropriate any new funds to continue this preliminary effort in the 01-03 fiscal year Transportation budget. WSDOT will request \$1.5 million in the 2002 Supplemental Transportation budget to begin full preliminary design on this project in order to begin phased construction by 2007.

What is being done to protect the environment?

The project design will preserve the existing environment, as well as make improvements over current conditions. The stormwater system will be retrofitted along the entire length of the project, improving water quality. During construction, measures are being scoped to minimize environmental impacts. Stormwater site plans will be prepared and implemented to prevent construction runoff. Additional noise walls will be added to reduce traffic noise. As preliminary designs are refined, environmental issues will be evaluated and appropriate mitigation developed.

Expenditure Plan

	Prior Expenditures	Remaining Costs	Total
State and Federal Funds			
Funded subtotal			
Unfunded amount		\$858,194,000	\$858,194,000
Total Cost		\$858,194,000	\$858,194,000
Financial data is current as of	10/1/01.		

How can I get more information?

For more information about this study, please contact:

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